

MTC Express Lanes WBS Summary

As of WBS Revision Version: 8/14/2013, V17

ProjectSolve2 Location: Bay Area Express Lanes Network/ 1 Program Management/ 100 Program Management & Controls/ 111 Controls Planning/ WBS

https://WW3.projectsolve2.com/eRoom/SFOF/BayAreaHOTLanesNetwork/0_deada

Notes

- Document is a work in progress
- WBS Levels 5 and 6 are under development
- System Integrator section is subject to revisions from the future System Integrator
- Does not include Regional Backhaul Wide Area Network

Summary

The structure of the MTC Express Lanes WBS is based on Caltrans Uniform File System. The structure has six hierarchical levels with Level 1 being the highest and Level 6 being the lowest. The WBS assists in organizing and maintaining consistency throughout the project. Areas that use the WBS include the schedule, cost estimation and ProjectSolve2.

The following is a summary of the six levels. Examples of each level are included below.

Level 1: Overall WBS for the Program or Project

Level 2: Sub-Program

Level 3: Project Segment

Level 4: Tasks (=Caltrans WBS level 5 for civil work); File Number for Filing

Level 5: Folders/Sub Tasks

Level 6: Subfolder/Files for Each Folder

WBS numbering follows the same six levels. Examples are below:

Level 1: No number assignment

Level 2: Single digits 1-6 (Example: 4)

Level 3: Double digits 01-09 (Example 4.02)

Level 4: Triple digits 000-990, generally in increments of 5 (Example 4.02.100)

Level 5: Triple digits 000-999, generally in increments of 1 (Example 4.02.100.102) [Still under development]

Level 6: Names of Subfolder (Example 4.02.100.102 Budget) [Still under development]

The WBS is maintained using Excel to accurately track each level of the WBS. Functionally, the WBS has an area on the left which allows users to control and filter which levels are shown. Users can show/hide levels by clicking the "+" "-" buttons or control the entire level by clicking on the individual level numbers.

Level 1: Overall WBS for the project

This is the highest category which encapsulates the entire project.

Level 2: Sub-Programs

Contains each Sub-Program. The sub programs include:

- 1 Program Management
- 2 System Management
- 3 Systems Integration (Lower levels in this sub-program are subject to change by the future System Integrator)
- 4 Highways Design
- 5 Highway Construction
- 6 Operations and Maintenance

Level 3: Project Segments

Phase and Corridors:

- 4.01 Ph1 PA&ED
- 4.02 I-680 PS&E
- 4.03 I-880 PS&E
- 4.04 Bay Bridge Approach PS&E
- 4.05 San Mateo Approach PS&E
- 4.06 Dumbarton Approach PS&E
- 4.07 I-80 Solano Conversion PS&E
- 4.08 I-680 CC North Conv PS&E
- 4.09 I-80 Alameda CC Conv PS&E

Level 4: Task/ File Number for Filing

Individual tasks for each segment. Examples are below:

- | | |
|----------|--------------------------------------|
| 1.00.000 | Meetings & Communication |
| 1.00.010 | Organization |
| 1.00.050 | Contracts & Agreement Administration |
| 1.00.060 | Financial & General Administration |
| 1.00.100 | Project Management & Controls |
| 1.00.140 | Data Collection |

Level 5: Folders/Sub Tasks

Folder names and number for each task. Examples are below:

- | | |
|--------------|--------------------|
| 6.00.900.001 | Tolling Regime |
| 6.00.900.002 | HOV Declaration |
| 6.00.900.003 | Hours of Operation |

Level 6: Subfolder/Files for each Folder

Names of each Subfolder. Examples are below:

1.00.050.20 Caltrans	Caltrans Interagency Agreements
1.00.050.20 BATA	BATA Interagency Agreements
1.00.050.20 FHWA	FHWA Interagency Agreements
1.00.050.20 CHP	CHP Interagency Agreements

WBS for MTC Express Lanes

WBS Codes	Sub-Programs	Packages	Task ID	Tasks	Folder #	Folders	Subfolders/Files
1	Program Management						
1.00.000			000	Meetings & Communication			
1.00.010			010	Organization			
1.00.050			050	Contracts & Agreement Administration			
1.00.060			060	Financial & General Administration			
1.00.100			100	Project Management & Controls			
1.01.140			140	Data Collection			
1.00.610			610	Reference Documents			
1.00.620			620	Press Articles			
1.00.630			630	Public Education			
1.00.640			640	Engineering/Technical Reviews			
1.00.650			650	Special Studies/Analyses			
2	Systems Management						
2.00.000			000	Meetings & Communication			
2.00.010			010	Organization			
2.00.050			050	Contracts & Agreement Administration			
2.00.100			100	Project Management & Controls			
2.00.140			140	Data Collection			
2.00.710			710	Concept of Operations			
2.00.720			720	System Requirements & Design			
2.00.730			730	Procurement Management			
2.00.740			740	System Engineering Management Plan			
2.00.750			750	System Design & Development Oversight			
2.00.760			760	Testing Oversight			
2.00.770			770	Installation Oversight			
2.00.780			780	Operations & Maintenance			
3	Systems Integration						
3.00.000			000	Meetings & Communication			
3.00.010			010	Organization			
3.00.050			050	Contract & Agreement Administration			
3.00.100			100	Project Management & Controls			
3.00.140			140	Data Collection			
3.00.810			810	Regulatory Documents			
3.00.820			820	Project Initiation Submittals			
3.00.830			830	Preliminary Design			
3.00.840			840	Detailed Design			
3.00.850			850	Factory Acceptance Test (FAT)			
3.00.860			860	Installation Planning & Readiness			
3.00.870			870	Onsite First Installation Test (OFIT)			
3.00.875			875	Onsite First Installation Test (OFIT)			
3.00.880			880	Final System Acceptance			
3.00.890			890	Operations & Maintenance			
4	Highway Design						
4.01		Ph1 PA&ED					
4.01.000			000	Meetings & Communication			
4.01.010			010	Organization			

WBS for MTC Express Lanes

WBS Codes	Sub-Programs	Packages	Task ID	Tasks	Folder #	Folders	Subfolders/Files
4.01.050			050	Contract & Agreement Administration			
4.01.100			100	Project Management & Controls			
4.01.140			140	Data Collection			
4.01.150			150	PID			
4.01.155			155	Traffic Forecasting & Operations Analysis			
4.01.160			160	Preliminary Engineering and Draft PR			
4.01.165			165	Environmental Studies and Draft ED			
4.01.170			170	Permits			
4.01.175			175	Circulate Environmental Document			
4.01.180			180	Project Report and final ED			
4.01.185			185	Prepare Base Maps & Plan Sheets			
4.01.200			200	Utility Relocation & Coordination			
4.02		I-680 PS&E					
4.02.000			000	Meetings & Communication			
4.02.050			050	Contract & Agreement Administration			
4.02.100			100	Project Management & Controls			
4.02.140			140	Data Collection			
4.02.190			190	Prepare Structures Site Plans			
4.02.200			200	Utility Relocation & Coordination			
4.02.205			205	Obtain Permits & Agreements			
4.02.220			220	Right of Way			
4.02.230			230	Draft PS&E			
4.02.240			240	Draft Structures PS&E			
4.02.260			260	Prepare Contract Documents			
4.02.265			265	Advertise, Award & Approve			
4.03		I-880 PS&E					
4.03.000			000	Meetings & Communication			
4.03.050			050	Contract & Agreement Administration			
4.03.100			100	Project Management & Controls			
4.03.140			140	Data Collection			
4.03.190			190	Prepare Structures Site Plans			
4.03.200			200	Utility Relocation/Coordination			
4.03.205			205	Obtain Permits & Agreements			
4.03.220			220	Right of Way			
4.03.230			230	Draft PS&E			
4.03.240			240	Draft Structures PS&E			
4.03.260			260	Prepare Contract Documents			
4.03.265			265	Advertise, Award & Approve			
4.04		Bay Bridge Approach PS&E					
4.04.000			000	Meetings & Communication			
4.04.050			050	Contract & Agreement Administration			
4.04.100			100	Project Management & Controls			
4.04.140			140	Data Collection			
4.04.190			190	Prepare Structures Site Plans			
4.04.200			200	Utility Relocation/Coordination			
4.04.205			205	Obtain Permits & Agreements			

WBS for MTC Express Lanes

WBS Codes	Sub-Programs	Packages	Task ID	Tasks	Folder #	Folders	Subfolders/Files
4.04.220			220	Right of Way			
4.04.230			230	Draft PS&E			
4.04.240			240	Draft Structures PS&E			
4.04.260			260	Prepare Contract Documents			
4.04.265			265	Advertise, Award & Approve			
4.05		San Mateo Approach		PS&E			
4.05.000			000	Meetings & Communication			
4.05.050			050	Contract & Agreement Administration			
4.05.100			100	Project Management & Controls			
4.05.140			140	Data Collection			
4.05.190			190	Prepare Structures Site Plans			
4.05.200			200	Utility Relocation/Coordination			
4.05.205			205	Obtain Permits & Agreements			
4.05.220			220	Right of Way			
4.05.230			230	Draft PS&E			
4.05.240			240	Draft Structures PS&E			
4.05.260			260	Prepare Contract Documents			
4.05.265			265	Advertise, Award & Approve			
4.06		Dumbarton Approach		PS&E			
4.06.000			000	Meetings & Communication			
4.06.060			050	Contract & Agreement Administration			
4.06.100			100	Project Management & Controls			
4.06.140			140	Data Collection			
4.06.190			190	Prepare Structures Site Plans			
4.06.200			200	Utility Relocation/Coordination			
4.06.206			205	Obtain Permits & Agreements			
4.06.220			220	Right of Way			
4.06.230			230	Draft PS&E			
4.06.240			240	Draft Structures PS&E			
4.06.260			260	Prepare Contract Documents			
4.06.265			265	Advertise, Award & Approve			
4.07		I-80 Solano Conversion		PS&E			
4.07.000			000	Meetings & Communication			
4.07.050			050	Contract & Agreement Administration			
4.07.100			100	Project Management & Controls			
4.07.140			140	Data Collection			
4.07.190			190	Prepare Structures Site Plans			
4.07.200			200	Utility Relocation & Coordination			
4.07.205			205	Obtain Permits & Agreements			
4.07.220			220	Right of Way			
4.07.230			230	Draft PS&E			
4.07.240			240	Draft Structures PS&E			
4.07.260			260	Prepare Contract Documents			
4.07.265			265	Advertise, Award & Approve			
4.08		I-680 CC North Conv		PS&E			
4.08.000			000	Meetings & Communication			

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WBS Codes	Sub-Programs	Packages	Task ID	Tasks	Folder #	Folders	Subfolders/Files
4.08.050			050	Contract & Agreement Administration			
4.08.100			100	Project Management & Controls			
4.08.140			140	Data Collection			
4.08.190			190	Prepare Structures Site Plans			
4.02.200			200	Utility Relocation & Coordination			
4.08.205			205	Obtain Permits & Agreements			
4.08.220			220	Right of Way			
4.08.230			230	Draft PS&E			
4.08.240			240	Draft Structures PS&E			
4.08.260			260	Prepare Contract Documents			
4.08.265			265	Advertise, Award & Approve			
4.09		I-80 Alameda CC Conv PS&E					
4.09.000			000	Meetings & Communication			
4.09.050			050	Contract & Agreement Administration			
4.09.100			100	Project Management & Controls			
4.09.140			140	Data Collection			
4.09.190			190	Prepare Structures Site Plans			
4.09.200			200	Utility Relocation & Coordination			
4.09.205			205	Obtain Permits & Agreements			
4.09.220			220	Right of Way			
4.09.230			230	Draft PS&E			
4.09.240			240	Draft Structures PS&E			
4.09.260			260	Prepare Contract Documents			
4.09.265			265	Advertise, Award & Approve			
5	Highway Construction						
5.00.000			000	Meetings & Communication			
5.00.050			050	Contract & Agreement Administration			
5.00.100			100	Project Management & Controls			
5.00.270			270	Construction Management			
5.00.295			295	Accept and Close Contract			
				Contractor's Schedule			
6	Operations and Maintenance						
6.00.000			000	Meetings & Communication			
6.00.050			050	Contract & Agreement Administration			
6.00.100			100	Project Management & Controls			
6.00.900			900	O&M - Policy and Procedures			
6.00.910			910	O&M - Warranty Period			
6.00.911			911	O&M - Post-Warranty Period			
6.00.920			920	Highway Maintenance			
6.00.930			930	Operations Center			
6.00.940			940	Enforcement			
6.00.950			950	Utilities			
6.00.960			960	Performance Monitoring			
6.00.990			990	Marketing			